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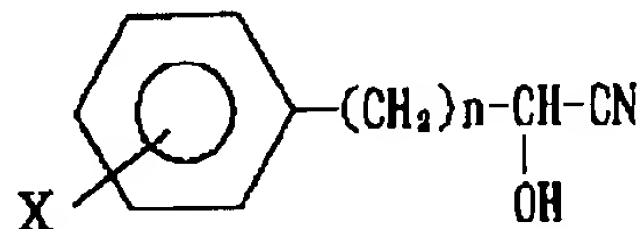
(54) PRODUCTION OF OPTICALLY ACTIVE  
ALPHA-HYDROXYCARBOXYLIC ACID  
HAVING PHENYL GROUP

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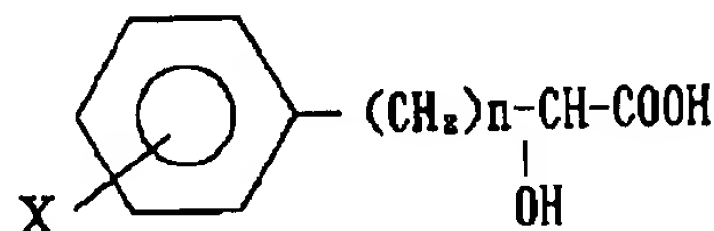
(57) Abstract:

PURPOSE: To produce an optically active  $\alpha$ -hydroxycarboxylic acid having a phenyl group by treating a specific  $\alpha$ -hydroxynitrile with the genus *Gordona* microorganism asymmetrically hydrolyzing the nitrile group or its treated product.

CONSTITUTION: An  $\alpha$ -hydroxynitrile of formula I (X is H, OH, etc., which may be placed at either of the ortho, meta and para positions; n is an integer of 0-2) is treated with the genus *Gordona* microorganism asymmetrically hydrolyzing the nitrile or its treated product in a neutral-to-basic aqueous medium to produce the  $\alpha$ -hydroxycarboxylic acid superior in the D-isomer or L-isomer. The compound of formula II is similarly produced from the mixture of hydrogen cyanide with an aldehyde corresponding to the nitrile of formula I.



I



II